

Storm Data and Unusual Weather Phenomena - August 2012

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
ILLINOIS, South				

(IL-Z075) JEFFERSON, (IL-Z076) WAYNE, (IL-Z077) EDWARDS, (IL-Z078) WABASH, (IL-Z080) PERRY, (IL-Z081) FRANKLIN, (IL-Z082) HAMILTON, (IL-Z083) WHITE, (IL-Z084) JACKSON, (IL-Z085) WILLIAMSON, (IL-Z086) SALINE, (IL-Z087) GALLATIN, (IL-Z088) UNION, (IL-Z089) JOHNSON, (IL-Z090) POPE, (IL-Z091) HARDIN, (IL-Z092) ALEXANDER, (IL-Z093) PULASKI, (IL-Z094) MASSAC

08/01/12 00:00 CST	0	Drought
08/31/12 23:59 CST	0	

The drought which began in May reached its most extreme stage by early August. Through the month of August, all of southern Illinois was in extreme to exceptional drought. The exceptional drought conditions were south of a line from Mount Carmel to Murphysboro. The remainder of southern Illinois was in extreme drought conditions. Soil moisture deficits remained very high. Throughout August, 80 to 100 percent of the region's topsoil and subsoil moisture was reported as short or very short. Many crops were heavily damaged, and numerous counties were declared natural disaster areas. Corn crops were a partial or complete loss. Soybeans were faring somewhat better. The percentage of pastures rated as poor or very poor held steady from July. Some small trees and shrubs were killed. Ponds across the region were dry or drying quickly. Even with the isolated rainfall from thunderstorms, fire danger remained high. Bans on outdoor burning were in place for numerous counties in southern Illinois. Streamflows were running normal to below normal. At the Carbondale airport, 6.24 inches of rain fell in August, which was over 3 inches above normal. However, two inches of this rain fell on the last day of the month, which was too late to impact August drought conditions. The drought began in May and continued into September.

JOHNSON COUNTY --- 1.1 E HOLLINS SPUR [37.40, -88.96]

08/01/12 15:40 CST	2K	Thunderstorm Wind (EG 52 kt)
08/01/12 15:40 CST	0	Source: State Official

Tree limbs were blown down near the Cache River State Natural Area.

UNION COUNTY --- 2.0 E DONGOLA [37.37, -89.13]

08/01/12 16:30 CST	40K	Thunderstorm Wind (EG 52 kt)
08/01/12 16:30 CST	0	Source: Law Enforcement

Trees and power lines were blown down. A couple of homes were damaged.

Isolated thunderstorms developed during the heat of the afternoon. The storms increased along a residual front or wind shift that settled into the very unstable air mass across the region. A couple of multicellular storms produced severe downburst winds.

JACKSON COUNTY --- MURPHYSBORO [37.77, -89.33], CARBONDALE [37.72, -89.22]

08/04/12 23:30 CST	0	Heavy Rain
08/05/12 00:45 CST	0	Source: Public

Over two inches of rain fell in about an hour. Some minor flooding of roads was reported.

Thunderstorms with torrential rain occurred ahead of a cold front that extended from the Great Lakes region across the St. Louis area to the Ozark Mountains.

JACKSON COUNTY --- GORHAM [37.72, -89.48]

08/16/12 14:30 CST	0	Hail (2.50 in)
08/16/12 14:30 CST	0	Source: Emergency Manager

Hail was just slightly smaller than baseballs.

An isolated severe thunderstorm developed in the heat of the afternoon. The storm formed ahead of a weak cold front that extended from central Illinois southwest across Missouri.

INDIANA, Southwest

(IN-Z081) GIBSON, (IN-Z082) PIKE, (IN-Z085) POSEY, (IN-Z086) VANDERBURGH, (IN-Z087) WARRICK, (IN-Z088) SPENCER

08/01/12 00:00 CST	0	Drought
08/31/12 23:59 CST	0	

The drought which began in May reached its most extreme stage by early August, then improved slightly. At the end of August, most of southwest Indiana was in extreme drought. Exceptional drought conditions were limited to the Lower Wabash Valley counties of Gibson and Posey. Soil moisture deficits remained very high. Throughout August, 70 to 90 percent of the region's topsoil and subsoil moisture

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was reported as short or very short. Many crops were heavily damaged, and numerous counties were declared natural disaster areas. Corn crops were a partial or complete loss. Soybeans were faring somewhat better. The percentage of pastures rated as poor or very poor held steady from July. Ponds across the region were dry or drying quickly. Even with the isolated rainfall from thunderstorms, fire danger remained high. Bans on outdoor burning were in place for numerous counties. Streamflows were running normal to below normal. At the Evansville airport, 4.10 inches of rain fell in August, which was over one inch above normal. For the year to date, 17.97 inches had fallen, which was 12.76 inches below normal. The drought began in May and continued into September.

WARRICK COUNTY --- NEWBURGH [37.95, -87.42]

08/02/12 20:45 CST	0	Heavy Rain
08/02/12 22:00 CST	0	Source: Trained Spotter

A trained spotter measured 1.5 inches of rain in 30 minutes. A foot of water was reported over a parking lot.

VANDERBURGH COUNTY --- (EVV)DRESS ARPT EVAN [38.03, -87.53], EVANSVILLE [37.98, -87.55]

08/02/12 21:00 CST	0	Heavy Rain
08/02/12 22:00 CST	0	Source: ASOS

The automated observing system at the Evansville airport measured 1.96 inches of rain in an hour.

Strong thunderstorms produced very heavy rain that caused local flooding. The storms were organized into a mesoscale convective system (MCS) that tracked slowly southeast across southwest Indiana. The storms were fueled by a southwest wind flow of very warm and humid air that averaged around 20 knots a few thousand feet above ground level. Precipitable water values near 2.3 inches supported torrential rainfall rates. The complex of storms formed along a warm front that extended from southern Missouri across southern Illinois.

VANDERBURGH COUNTY --- EVANSVILLE [37.98, -87.55]

08/16/12 18:05 CST	0	Heavy Rain
08/16/12 18:05 CST	0	Source: Trained Spotter

Street flooding was reported on the east side of Evansville at Interstate 164 and Indiana Highway 66.

SPENCER COUNTY --- ROCKPORT [37.88, -87.05]

08/16/12 18:08 CST	3K	Thunderstorm Wind (MG 51 kt)
08/16/12 18:08 CST	0	Source: Trained Spotter

Numerous tree limbs and branches were blown down. Many gusts were clocked around 58 mph.

A line of strong to severe thunderstorms produced heavy rain and an isolated report of damaging wind. The line of storms originated along a cold front moving southeastward across Illinois and Missouri. Mid-level winds around 30 knots were sufficient to maintain organization of the convective system.

KENTUCKY, Southwest

(KY-Z001) FULTON, (KY-Z002) HICKMAN, (KY-Z003) CARLISLE, (KY-Z004) BALLARD, (KY-Z005) MCCracken, (KY-Z006) GRAVES, (KY-Z007) LIVINGSTON, (KY-Z008) MARSHALL, (KY-Z009) CALLOWAY, (KY-Z010) CRITTENDEN, (KY-Z011) LYON, (KY-Z012) TRIGG, (KY-Z013) CALDWELL, (KY-Z014) UNION, (KY-Z015) WEBSTER, (KY-Z016) HOPKINS, (KY-Z017) CHRISTIAN, (KY-Z018) HENDERSON, (KY-Z019) DAVIESS, (KY-Z020) MCLEAN, (KY-Z021) MUHLENBERG, (KY-Z022) TODD

08/01/12 00:00 CST	0	Drought
08/31/12 23:59 CST	0	

The drought which began in May reached its most extreme stage by early August. Exceptional drought conditions persisted across far western Kentucky, west of a line from Henderson to Kentucky Lake. Extreme drought conditions were observed across the remainder of western Kentucky, including the Pennyriple region and the Owensboro/Henderson areas. Soil moisture deficits remained very high. Anywhere from 70 to 100 percent of the region's topsoil and subsoil moisture was reported as short or very short. The most severe soil moisture deficits were west of Kentucky Lake. Many crops were heavily damaged, and numerous counties were declared natural disaster areas. Corn crops were a partial or complete loss. Soybeans were faring somewhat better. The percentage of pastures rated as poor or very poor held steady from July. Some small trees and shrubs were killed. Ponds across the region were dry or drying quickly. A water shortage watch was issued by the State of Kentucky for Mclean and Crittenden Counties. The drinking water supply for some residents of those counties was low enough to warrant conservation measures. Across the western part of Kentucky, there were sporadic reports of domestic wells that stopped pumping. Even with the isolated rainfall from thunderstorms, fire danger remained high. Bans on outdoor burning were in place for numerous counties. Streamflows were running normal to below normal. At Paducah, 2.75 inches of rain fell in August, which was within one percent of normal. For the year to date, 16.05 inches had fallen, which

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was 16.26 inches below normal. The drought began in May and continued into September.				
HENDERSON COUNTY --- 0.7 N HENDERSON [37.84, -87.58], 1.3 NNE OHIORIVER ORDINANCE [37.82, -87.61], 1.1 SSE HENDERSON [37.82, -87.57], 1.2 E HENDERSON [37.83, -87.56]				
	08/02/12 21:55 CST		0	Flash Flood (due to Heavy Rain)
	08/02/12 22:30 CST		0	Source: Trained Spotter
Many city streets had two to three feet of water over them.				
MUHLENBERG COUNTY --- CENTRAL CITY [37.30, -87.13]				
	08/02/12 23:30 CST		0	Heavy Rain
	08/03/12 00:10 CST		0	Source: Trained Spotter
Several roadways and main routes throughout the city had about six inches of water over them.				
Strong thunderstorms produced very heavy rain that caused local flooding. The storms were organized into a mesoscale convective system (MCS) that tracked slowly southeast across northwest Kentucky. The storms were fueled by a southwest wind flow of very warm and humid air that averaged around 20 knots a few thousand feet above ground level. Precipitable water values near 2.3 inches supported torrential rainfall rates. The complex of storms formed along a warm front that extended from southern Missouri across southern Illinois.				
MCCRACKEN COUNTY --- 1.1 NE SHADY GROVE [36.99, -88.51]				
	08/05/12 15:32 CST		5K	Lightning
	08/05/12 15:32 CST		0	Source: Newspaper
Lightning struck a vehicle on the westbound off-ramp of Interstate 24 at exit 16. The electrical system of the car malfunctioned, causing the operator of the vehicle to lose control. The driver and three passengers were treated at a local hospital for non life-threatening injuries.				
A thunderstorm produced a lightning strike that disabled a moving vehicle. The storm occurred along a weak cold front that extended from the Lower Great Lakes region to the Lower Ohio Valley.				
(KY-Z011) LYON				
	08/11/12 13:00 CST		0	Wildfire
	08/11/12 22:00 CST		0	
A large brush fire scorched about 250 acres in the Land Between The Lakes National Recreation Area. The fire occurred on the northern end of the recreation area, sending heavy smoke across the community of Grand Rivers. About a half dozen fire departments from Lyon and Livingston Counties, along with state and federal fire agencies, battled the blaze. A few roads were closed, including the main highway providing access to the recreation area. Heavy smoke forced some people out of campgrounds, but none were closed.				
BALLARD COUNTY --- 2.5 N BARLOW [37.09, -89.05], 2.5 S OSCAR [37.09, -89.03]				
	08/16/12 18:10 CST		10K	Thunderstorm Wind (EG 56 kt)
	08/16/12 18:10 CST		0	Source: Emergency Manager
Several small trees were across roads. Power lines were blown down. The damage was mostly on or near Highway 1105 between Barlow and Oscar.				
MCCRACKEN COUNTY --- WEST PADUCAH [37.08, -88.75], PADUCAH [37.08, -88.63]				
	08/16/12 18:27 CST		20K	Thunderstorm Wind (MG 51 kt)
	08/16/12 18:35 CST		0	Source: ASOS
A wind gust to 59 mph was measured at Barkley Regional Airport, four miles west of Paducah. Numerous tree limbs and a few small trees were blown down about a mile north of the airport. A tree fell on a house in the city of Paducah.				
MUHLENBERG COUNTY --- GREENVILLE [37.20, -87.18], SOUTH CARROLLTON [37.33, -87.15]				
	08/16/12 18:55 CST		15K	Thunderstorm Wind (EG 56 kt)
	08/16/12 19:10 CST		0	Source: State Official
Numerous trees were blown down across the county. Trees were down in the Greenville, South Carrollton, and Central City areas, as well as rural areas. There were power lines down.				
LYON COUNTY --- KUTTAWA [37.07, -88.12], EDDYVILLE [37.05, -88.07]				
	08/16/12 19:05 CST		30K	Thunderstorm Wind (EG 52 kt)
	08/16/12 19:21 CST		0	Source: Trained Spotter

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In Eddyville, a trained spotter heard branches breaking off trees as the power went out. Wind gusts were estimated near 60 mph. In the Kuttawa area west of Eddyville, county road crews were dispatched to clear numerous trees over State Roads 810, 93, 295, and 819.				

CALLOWAY COUNTY --- MURRAY [36.62, -88.32]

08/16/12 19:30 CST	0	Hail (0.75 in)
08/16/12 19:30 CST	0	Source: Emergency Manager

Dime-size hail occurred on the south side of the city.

TRIGG COUNTY --- 2.0 S CADIZ [36.84, -87.82], 4.0 NW CADIZ [36.91, -87.87]

08/16/12 19:35 CST	15K	Thunderstorm Wind (EG 52 kt)
08/16/12 19:45 CST	0	Source: Trained Spotter

A tree was blown down on a car off State Route 139 north of Cadiz. One person was trapped. On Highway 139 south of Cadiz, a tree was blown onto a power line. Several other trees were blown down.

TRIGG COUNTY --- 2.5 E MONTGOMERY [36.88, -87.68]

08/16/12 19:45 CST	0	Thunderstorm Wind (MG 50 kt)
08/16/12 19:45 CST	0	Source: Trained Spotter

A trained spotter near the Christian County line measured a wind gust to 58 mph.

CHRISTIAN COUNTY --- 1.8 WSW JULIEN [36.82, -87.66]

08/16/12 19:48 CST	5K	Thunderstorm Wind (EG 56 kt)
08/16/12 19:48 CST	0	Source: Emergency Manager

A tractor-trailer rig was overturned on Interstate 24 at mile marker 72.

CHRISTIAN COUNTY --- HOPKINSVILLE [36.85, -87.48], 2.0 S HOPKINSVILLE [36.82, -87.48]

08/16/12 19:53 CST	0	Thunderstorm Wind (MG 56 kt)
08/16/12 19:55 CST	0	Source: Trained Spotter

A trained spotter measured a wind gust to 65 mph about two miles south of Hopkinsville. Another spotter measured a gust to 60 mph on the south side of Hopkinsville.

TRIGG COUNTY --- ROARING SPG [36.72, -87.70]

08/16/12 19:53 CST	5K	Thunderstorm Wind (EG 50 kt)
08/16/12 19:53 CST	0	Source: Department of Highways

Several trees were blown down on state roads.

CHRISTIAN COUNTY --- 3.0 NE OAK GROVE [36.70, -87.39]

08/16/12 20:05 CST	5K	Thunderstorm Wind (MG 56 kt)
08/16/12 20:05 CST	0	Source: Trained Spotter

A couple of trees were blown down. Both trees landed across roads, causing traffic problems. One of the trees was 20 feet tall.

A line of strong to severe thunderstorms produced scattered reports of damaging wind across western Kentucky. Most of the wind damage was east of Kentucky Lake. Strong surface pressure falls ahead of the line of storms, combined with very unstable air out ahead of the line, contributed to surging line segments and bow echoes. The line of storms originated along a cold front moving southeastward across Illinois and Missouri. Mid-level winds around 30 knots were sufficient to maintain organization of the convective system.

MISSOURI, Southeast

(MO-Z076) PERRY, (MO-Z086) BOLLINGER, (MO-Z087) CAPE GIRARDEAU, (MO-Z100) WAYNE, (MO-Z107) CARTER, (MO-Z108) RIPLEY, (MO-Z109) BUTLER, (MO-Z110) STODDARD, (MO-Z111) SCOTT, (MO-Z112) MISSISSIPPI, (MO-Z114) NEW MADRID

08/01/12 00:00 CST	0	Drought
08/31/12 23:59 CST	0	

The drought which began in May reached its most extreme stage by early August. Through the month of August, all of southeast

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Missouri was in extreme to exceptional drought. The exceptional drought conditions were along and south of a line from Doniphan to Jackson. The remainder of southeast Missouri was in extreme drought conditions. Soil moisture deficits remained very high. Throughout August, 80 to 100 percent of the region's topsoil and subsoil moisture was reported as short or very short. Many crops were heavily damaged, and numerous counties were declared natural disaster areas. Corn crops were a partial or complete loss. Soybeans were faring somewhat better. The percentage of pastures rated as poor or very poor held steady from July. Some small trees and shrubs were killed. Ponds across the region were dry or drying quickly. Even with the isolated rainfall from thunderstorms, fire danger remained high. Bans on outdoor burning were in place for numerous counties in southeast Missouri. Streamflows were running normal to below normal. At the Cape Girardeau airport, 1.44 inches of rain fell in August, which was only about half of normal. Rainfall for the year-to-date was 14.27 inches, which was 16.58 inches below normal. The drought began in May and continued into September.

PERRY COUNTY --- BIEHLE [37.60, -89.85]

08/02/12 10:25 CST	10K	Thunderstorm Wind (EG 56 kt)
08/02/12 10:25 CST	0	Source: Trained Spotter

A section of roof was blown off a large machine shed.

STODDARD COUNTY --- 4.0 SW DEXTER [36.76, -90.00]

08/03/12 01:00 CST	0	Hail (1.00 in)
08/03/12 01:00 CST	0	Source: Trained Spotter

A couple of isolated severe storms occurred along a weak warm front that extended from southern Missouri across southern Illinois.

BOLLINGER COUNTY --- 6.0 W ZALMA [37.15, -90.19], GIPSY [37.17, -90.18]

08/03/12 16:12 CST	0	Hail (1.75 in)
08/03/12 16:15 CST	0	Source: Trained Spotter

Hail from half-dollar to golf-ball size was reported several miles west of Zalma.

A severe storm developed along a weak warm front that extended from west to east across southern Missouri. The storm occurred in a hot and very unstable air mass during the heat of the afternoon.

(MO-Z108) RIPLEY, (MO-Z109) BUTLER, (MO-Z110) STODDARD, (MO-Z111) SCOTT, (MO-Z112) MISSISSIPPI, (MO-Z114) NEW MADRID

08/04/12 13:00 CST	0	Heat
08/04/12 18:00 CST	0	

A southerly wind flow ahead of a cold front over central Missouri brought very hot and humid conditions. Along and south of a line from Sikeston to Poplar Bluff and Doniphan, high temperatures were in the mid 90's. The heat index topped out from 105 to 110 degrees.

WAYNE COUNTY --- GREENVILLE [37.13, -90.47]

08/16/12 15:04 CST	0	Hail (0.75 in)
08/16/12 15:04 CST	0	Source: Trained Spotter

WAYNE COUNTY --- PATTERSON [37.18, -90.57]

08/16/12 15:15 CST	0	Hail (0.88 in)
08/16/12 15:15 CST	0	Source: Public

RIPLEY COUNTY --- DONIPHAN [36.62, -90.82]

08/16/12 15:44 CST	0	Thunderstorm Wind (MG 59 kt)
08/16/12 15:44 CST	0	Source: Trained Spotter

A wind gust to 68 mph was measured.

RIPLEY COUNTY --- 4.0 NE DONIPHAN [36.66, -90.77]

08/16/12 15:53 CST	0	Hail (1.25 in)
08/16/12 15:53 CST	0	Source: Trained Spotter

BUTLER COUNTY --- HENDRICKSON [36.90, -90.48]

08/16/12 16:04 CST	0	Hail (1.25 in)
08/16/12 16:04 CST	0	Source: Trained Spotter

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BUTLER COUNTY --- 7.0 NW POPLAR BLUFF [36.82, -90.49]				
	08/16/12 16:06 CST		0	Hail (0.75 in)
	08/16/12 16:06 CST		0	Source: Trained Spotter

Wind gusts were estimated near 50 mph.

Storms consolidated along a cold front as it moved southeast across Illinois and Missouri. A very warm and moist air mass ahead of the front resulted in more than adequate instability to sustain severe storms as the front settled southeastward. Rather weak mid-level winds were compensated for by strong instability.